

Sub
A1
WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:
image obtaining means for obtaining a second image
of a predetermined aspect size ratio from a first image
on the basis of an aspect size ratio of said first
image; and
reducing means for reducing the second image
obtained by said image obtaining means.
- 10 2. An apparatus according to claim 1, wherein when
the aspect size ratio of said first image is out of a
predetermined range, said image obtaining means obtains
said second image.
- 15 3. An apparatus according to claim 2, wherein said
image obtaining means generates an image of the aspect
size ratio of said predetermined value as said second
image.
- 20 4. An apparatus according to claim 1, wherein said
reducing means reduces the second image obtained by
said image obtaining means at a same reduction ratio in
both vertical and lateral directions of said second
image.
- 25 5. An apparatus according to claim 1, further
comprising adding means for adding specific information

CERTIFICATE OF MAILING

to an arbitrary end section of the reduced image obtained by said reducing means.

5 6. An apparatus according to claim 5, wherein said
reducing means obtains said reduced image such that the
reduced image to which said specific information was
added by said adding means goes in an image frame of a
predetermined size.

10 7. An apparatus according to claim 5, wherein said
adding means adds the specific information to both end
sections in the longitudinal direction between the
vertical and lateral directions of said reduced image.

15 8. An apparatus according to claim 5, wherein said
adding means uses a reduced image to which said
specific information was added as an image for display.

20 9. An image processing apparatus comprising:
image obtaining means for obtaining at least two
images of a second image in an arbitrary area portion
of a first image and a third image in the other area
portion on the basis of an aspect size ratio of said
first image; and

25 reducing means for reducing said second and third images obtained by said image obtaining means at different reduction ratios, respectively.

10. An apparatus according to claim 9, wherein in
the case where the aspect size ratio of said first
image is out of a predetermined range, said image
obtaining means obtains said second and third images.

5

11. An apparatus according to claim 9, wherein said
reducing means reduces said second and third images at
the different reduction ratios so that said second and
third images after completion of the reduction go in an
10 image frame of a predetermined size, respectively.

12. An apparatus according to claim 9, wherein said
reducing means reduces said second image at a same
reduction ratio in both vertical and lateral directions
15 of said second image, reduces said third image at a
reduction ratio larger than that of said second image
in the direction corresponding to the longitudinal
direction of said first image between the vertical and
lateral directions of said third image, and reduces
20 said third image at a same reduction ratio as that of
said second image in the other direction.

25

13. An apparatus according to claim 9, wherein said
image obtaining means obtains said second image from
said arbitrary area portion of said first image.

14. An apparatus according to claim 9, wherein said

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

arbitrary area portion includes a mid section of said first image.

15. An apparatus according to claim 9, wherein said
image obtaining means picks out said second image
having a size of $a (a < A) \times B$ from said first image,
where,

A: size in the longitudinal direction between the vertical and lateral directions of said first image,

10 B: size in the minor direction of said first image.

16. An apparatus according to claim 9, further comprising display means for displaying reduced images obtained by said reducing means.

17. An apparatus according to claim 16, wherein said display means displays a list of a plurality of reduced images obtained by said reducing means.

20

18. An image processing system to which a plurality of equipment are connected so that they can communicate, wherein at least one of said plurality of equipment has a function of an image processing apparatus, and said image processing apparatus comprises:

25

image obtaining means for obtaining a second image

of a predetermined aspect size ratio from a first image on the basis of an aspect size ratio of said first image; and reducing means for reducing the second image obtained by said image obtaining means.

19. An image processing method which can manage a plurality of images and display a list by using reduced images of said images, comprising:

10 a generating step of, when a target image is an
elongated image whose aspect ratio is larger than a
first predetermined value, generating a reduced image
of an aspect ratio of a second predetermined value from
an arbitrary area portion of said target image; and

15 a display step of displaying the reduced image of
the aspect ratio of said second predetermined value
generated in said generating step.

20. A method according to claim 19, wherein said
20 second predetermined value includes said first
predetermined value.

21. A method according to claim 19, wherein in said generating step, a same reduction ratio is set in both vertical and lateral directions of said reduced image.

22 A method according to claim 19, wherein

specific marks are added to one or a plurality of upper, lower, right, and left positions of said reduced image of the aspect ratio of said second predetermined value.

5

23. A method according to claim 22, wherein said specific marks are added to both ends in the longitudinal direction of said reduced image of the aspect ratio of said second predetermined value.

10

24. A method according to claim 22, wherein in said generating step, the reduced image to which said specific marks were added is used as a reduced image for display.

15

25. An image processing method which can manage a plurality of images and display a list by using reduced images of said images, comprising:

a generating step of, when a target image is an elongated image whose aspect ratio is larger than a predetermined value, generating a reduced image of said target image by making reduction ratios in the vertical and lateral directions different in an arbitrary area portion and the other area portion of said target image; and

a display step of displaying the reduced image generated in said generating step.

RECEIVED
SEARCHED
INDEXED
FILED

26. A method according to claim 25, wherein said generating step includes the steps of:

reducing said arbitrary area portion at a same reduction ratio in both vertical and lateral directions;

5 when said target image is a laterally-wide image, setting the reduction ratio in the lateral direction in said other area portion to be larger than that in the vertical direction, making the reduction ratio in the vertical direction identical to that of said arbitrary area portion, and reducing said image; and

10 when said target image is a vertically-long image, making the reduction ratio in the lateral direction in said other area portion identical to that in said arbitrary area portion, setting the reduction ratio in the vertical direction to be larger than that in the lateral direction, and reducing said image.

15 27. A method according to claim 19, wherein said arbitrary area portion includes a mid section of said target image.

20 28. A method according to claim 19, wherein said arbitrary area portion includes an area having a size 25 of $a (a < A) \times B$,

where,

A: size in the longitudinal direction between the

SEARCHED
INDEXED
COPIED
SERIALIZED
FILED

vertical and lateral directions of said target image,

B: size in the minor direction of said target image.

5 29. A storage medium which stores a computer-readable program, wherein said program realizes an image processing method comprising:

10 a generating step of, when a target image is an elongated image whose aspect ratio is larger than a first predetermined value, generating a reduced image of an aspect ratio of a second predetermined value from an arbitrary area portion of said target image; and
15 a display step of displaying the reduced image of the aspect ratio of said second predetermined value generated in said generating step.

30. A storage medium which stores a computer-readable program, wherein said program realizes an image processing method comprising:

20 a generating step of, when a target image is an elongated image whose aspect ratio is larger than a predetermined value, generating a reduced image of said target image by making reduction ratios in the vertical and lateral directions different in an arbitrary area portion and the other area portion of said target image; and
25 a display step of displaying the reduced image generated in said generating step.

SEARCHED
INDEXED
SERIALIZED
FILED